

(19)



Europäisches Patentamt  
European Patent Office  
Office européen des brevets

(11) Publication number:

**0 246 758**  
**A3**

(12)

# EUROPEAN PATENT APPLICATION

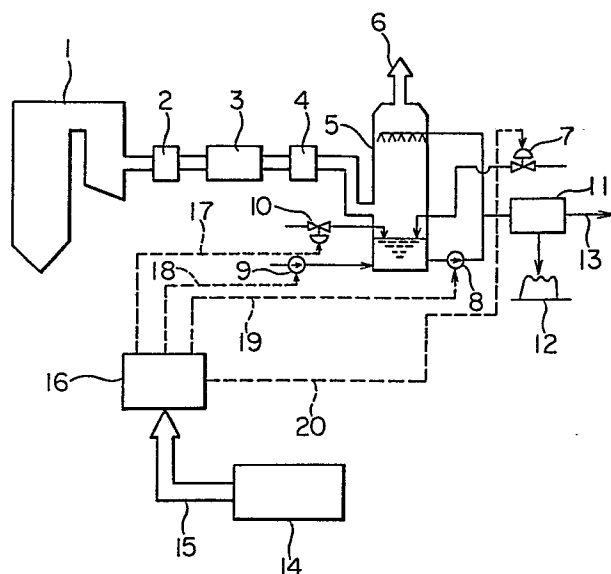
(21) Application number: **87303530.7**(51) Int. Cl.4: **B 01 D 53/34**(22) Date of filing: **22.04.87**(30) Priority: **23.04.86 JP 93592/86**(43) Date of publication of application: **25.11.87**  
**Bulletin 87/48**(84) Designated Contracting States: **DE GB IT**(88) Date of deferred publication of search  
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(54) **Method for controlling wetprocess flue gas desulfurization.**

(57) Optimum overall operation of a whole plant including a combustion unit such as a boiler (1) and a wetprocess flue gas desulfurization unit (5) comprising an absorption column for removing sulfur dioxide from a flue gas from the combustion unit by absorption using a slurry of an absorbing agent such as limestone powder circulated through absorption column, recycle pumps (8) for circulating the slurry through the absorption column and oxidation air blowers (9) for supplying an oxidation air to the absorption column and a recycle tank is controlled by anticipating a future pH value of the circulating slurry and a future inlet sulfur dioxide content of the flue gas from a present pH value of the circulating slurry and a present inlet sulfur dioxide content of the flue gas and their change rates by computing, anticipating a future desulfurization ratio from both the anticipated pH value and inlet SO<sub>2</sub> content and a recycle rate of the slurry, and controlling the recycle rate of the circulating slurry on the basis of the anticipated desulfurization ratio, where a desired desulfurization ratio can be readily and continuously maintained against any change in fuel species and load of a boiler with reduced utility consumption.



**EP 0 246 758 A3**



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# EUROPEAN SEARCH REPORT

0246758

Application Number

EP 87 30 3530

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
A	US-A-3 767 765 (GUSTAVSSON et al.) * whole document *	1	B 01 D 53/34
A	PATENT ABSTRACTS OF JAPAN, vol. 9, no. 66 (C-271)(1789), 26th March 1985; & JP - A - 59 199 021 (MITSUBISHI JUKOGYO) 12-11-1984	1,3,5	
A	PATENT ABSTRACTS OF JAPAN, vol.9, no. 96 (C-278)(1819), 25th April 1985; & JP - A - 59 225 723 (MITSUBISHI JUKOGYO) 18-12-1984	1,2	
A	DE-A-3 523 820 (MITSUBISHI JUKOGYO) * page 10, line 32 - page 11, line 31; claims 1,3; figure 1 *	1,2,6	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			B 01 D 53/00 C 01 F 11/00
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 03-05-1988	Examiner HILD
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document	

EPO FORM 1503 03.82 (P0401)